



# UNITED STATES PATENT AND TRADEMARK OFFICE



APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/007,276	11/12/2001	Makoto Nishigaki	450100-03614	6917	
20999 7.	7590 05/13/2004		EXAMINER		
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL.			BATTAGLIA, MICHAEL V		
NEW YORK,			ART UNIT	PAPER NUMBER	
			2652	6	
			DATE MAILED: 05/13/2004	DATE MAILED: 05/13/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action Commons	10/007,276	NISHIGAKI, MAKOTO			
Office Action Summary	Examiner	Art Unit			
	Michael V Battaglia	2652			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on <u>12 N</u>	ovember 2001.				
·					
3) Since this application is in condition for alloward					
Disposition of Claims					
4) ☐ Claim(s) 1-6 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or					
Application Papers					
9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on 12 November 2001 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Example 11.	are: a) $\square$ accepted or b) $\boxtimes$ object drawing(s) be held in abeyance. Settion is required if the drawing(s) is ob-	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicat writy documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:				
S. Patent and Trademark Office					



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#### **DETAILED ACTION**

## **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

## **Drawings**

2. Figures 1, 2A-2F, and 3A-3F should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

## Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

# Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's admitted Prior Art.

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In regard to claim 1, Prior Art discloses a playback apparatus for reproducing data recorded on a disk medium by using an optical pickup, said playback apparatus comprising: RF signal generating means for generating an RF signal on the basis of an analog signal outputted by said optical pickup (Fig. 1, element 4); data signal generating means for generating a data signal by binarizing said RF signal (Fig. 1, element 7); defect signal generating means for generating a defect signal for indicating a defect on said disk medium on the basis of said RF signal (Fig. 1, element 8); focus error signal generating means for generating a focus error signal on the basis of said analog signal outputted by said optical pickup (Fig. 1, element 5); focus servo control means for controlling a focus servo of said optical pickup in response to said focus error signal (Fig. 1, element 9); tracking error signal generating means for generating a tracking error signal on the basis of said analog signal outputted by said optical pickup (Fig. 1, element 6); tracking servo control means for controlling a tracking servo of said optical pickup in response to said tracking error signal (Fig. 1, element 11); monitoring means for monitoring said defect signal and thereby detecting a start and an end of a defect period (Fig. 1, elements 9 and 11); defect period processing control means for controlling said focus servo control means and said tracking servo control means so that said focus servo control means and said tracking servo control means perform defect period processing when a result of the monitoring by said monitoring means indicates said defect period (Page 3, lines 11-18); and post-defect period processing control means for controlling said focus servo control means and said tracking servo control means so that said focus servo control means and said tracking servo control means perform post-defect period processing when a result of the monitoring by said monitoring means indicates the end of said defect period (Page 3, lines 6-11). The focus and tracking servo control means monitor the defect signal and output signals dependent on the start and the end of a defect period.

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In regard to claim 2, Prior Art discloses that said defect period processing control means controls said focus servo control means and said tracking servo control means so that said focus error signal or said tracking error signal of said optical pickup is held at a predetermined value (Page 3, lines 11-18).

In regard to claim 3, Prior Art discloses that said post-defect period processing control means controls said focus servo control means and said tracking servo control means so that servo operation of said optical pickup is sped up (Page 3, lines 6-18). During the defect period, the focus and tracking error signals are held at a predetermined value, feedback is no longer used, and the servo operation is stopped. Then, when the defect period ends and the post-defect period begins, feedback in the form of the focus and tracking error signals is used and the servo operation is started again and sped up from a stopped state.

In regard to claim 4, Prior Art discloses that when said monitoring means detects the start of said defect period during said post-defect period processing performed under control of said post-defect period processing control means, said post-defect period processing control means stops said post-defect period processing, and said defect period processing control means starts said defect period processing (Figs. 2A-2F).

In regard to claims 5 and 6, Prior Art discloses a playback method for a playback apparatus, said playback apparatus reproducing data recorded on a disk medium by using an optical pickup, said playback method comprising: an RF signal generating step for generating an RF signal on the basis of an analog signal outputted by said optical pickup (Fig. 1, element 4); a data signal generating step for generating a data signal by binarizing said RF signal (Fig. 1, element 7); a defect signal generating step for generating a defect signal for indicating a defect on said disk medium on the basis of said RF signal (Fig. 1, element 8); a focus error signal generating step for

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generating a focus error signal on the basis of said analog signal outputted by said optical pickup (Fig. 1, element 5); a focus servo control step for controlling a focus servo of said optical pickup in response to said focus error signal (Fig. 1, element 9); a tracking error signal generating step for generating a tracking error signal on the basis of said analog signal outputted by said optical pickup (Fig. 1, element 6); a tracking servo control step for controlling a tracking servo of said optical pickup in response to said tracking error signal (Fig. 1, element 11); a monitoring step for monitoring said defect signal and thereby detecting a start and an end of a defect period (Fig. 1, elements 9 and 11); a defect period processing control step for controlling processing of said focus servo control step and processing of said tracking servo control step so that defect period processing is performed when a result of the monitoring by processing of said monitoring step indicates said defect period (Page 3, lines 11-18); and a post-defect period processing control step for controlling the processing of said focus servo control step and the processing of said tracking servo control step so that post-defect period processing is performed when a result of the monitoring by the processing of said monitoring step indicates the end of said defect period (Page 3, lines 6-11). The defect signal is monitored by the focus and tracking servo control means, which output signals dependent on the start and the end of a defect period. The playback method is inherently recorded as a computer readable playback program on a recording medium because the playback apparatus of Fig. 1 functions by carrying out a playback program to reproduce data. It is noted that an optical disc, a semiconductor board, an electrical circuit, and anything capable of storing a program or function is interpreted as a recording medium.

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### Citation of Relevant Prior Art

5. Obata et al (US 5,818,804) (Fig. 8), Sasaki et al (US 5,623,465) (Fig. 4), and Sakamoto et al (US 6,510,112) disclose playback apparatuses that generate a defect signal indicating a disc defect on the basis of an RF signal, process during a defect period by controlling focus and/or tracking servo control means to hold a tracking and/or focusing error signals at a predetermined value.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V Battaglia whose telephone number is (703) 305-4534. The examiner can normally be reached on 5-4/9 Plan with 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Battaglia

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W. R. YOUNG )
PRIMARY EXAMINER